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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,674	10/15/2001	Sauro Tronchetti	048337-9003-02	3490
23409	7590	01/15/2004	EXAMINER	
MICHAEL BEST & FRIEDRICH, LLP 100 E WISCONSIN AVENUE MILWAUKEE, WI 53202			KNABLE, GEOFFREY L	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/977,674

Applicant(s)

TRONCHETTI, SAURO

Examiner

Geoffrey L. Knable

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 12-31-2001
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. Applicant's election of group II, claims 27-46 in Paper No. 10-30-2003 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 29-31 and 39-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 29 and 39 refer to improving "the aesthetics" of the material – it however is not considered that the scope of this requirement can be readily ascertained (i.e. no standard is apparent for what is and is not "improved aesthetics"), these claims being therefore indefinite.

Claims 30 and 40 refer to making the sheet "more cloth-like" – it however is likewise not considered that the scope of this requirement can be readily ascertained, these claims being therefore indefinite. In other words, there is no clear indication of what defines a material as "more cloth-like".

In claim 31 and 41, the scope of "relatively low-caliber", "relatively low quality" and "low cost" cannot be readily ascertained as there is no definite standard to which these are relative, these claims being therefore indefinite.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 27 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Morrison et al. (US 5,771,796).

Morrison et al. discloses embossing a fabric sheet between an embossing roller (50 in fig. 2) and a second roller (54) where the embossing roller is formed by first forming a series of protrusions (e.g. mirror image of ridges 14) over the entire surface of the roller and then forming a pattern or design by at least partial removal of the protrusions leaving a foreground design surrounded by the background protrusions - note esp. col. 5, lines 44-65. Such satisfies the requirements of claim 27. As to claim 34, a steel embossing roll is described (col. 5, lines 44-45) and further the second roller is described as paper/wood filled or plastic (col. 6, lines 12+), this being considered to be at least somewhat resilient.

6. Claims 29-33 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morrison et al. (US 5,771,796).

As to claim 29, although as noted above it is not entirely clear what the scope of this claim is, it would seem reasonable to consider that the described patterning and texturing in the reference would improve the "aesthetics" of the material – in any event, it certainly would have been obvious to improve the material aesthetics.

As to claims 30 and 33, again, although it is not entirely clear what the scope of these claims is, it would seem reasonable to consider that the described provision of a "very soft hand" without shiny areas (e.g. col. 3, lines 21-31) would make the material "more cloth-like" and softer as claimed – in any event, even if not within these claims, it would have been obvious to improve the material feel and appearance for only the expected results.

As to claim 31, as noted above, it is not clear what constitutes "relatively low caliber" and relatively low quality/cost materials as there is no indication of what these are relative to. In any event, it would have been obvious to use low cost/quality materials if desired in order to reduce the cost of the final product.

As to claim 32, the reference indicates that "innumerable" embossed patterns are possible and specifically illustrates a floral pattern (e.g. col. 5, lines 11+). Such would seem to suggest or certainly render obvious embossing a graphic as claimed.

7. Claims 37 and 39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morrison et al. (US 5,771,796) as applied to claims 27 and 29-34 above, and further in view of Gutknecht et al. (US 2,854,336).

Claim 37 differs from claim 27 in further defining the relative protrusion dimensions in width and circumferential directions. Morrison et al. exemplifies ridges

(14) extending the length of the fabric for the background pattern and thus the protrusion dimension in the direction of the circumference of the embossing roller would not be substantially less than the circumference as claimed. This reference however clearly indicates that other embossed background patterns are possible including "simulated weave effects" (col. 5, lines 19-21). This would seem to suggest/render obvious a protrusion pattern that would have to be smaller in both directions as claimed (i.e. "simulated weave effects" would have been seen as requiring an embossing pattern that would have small scale patterning in both directions). Gutknecht et al. was cited as additional evidence of the known formation of a background pattern in an embossing roller that include discrete elements/projections – note for example figs. 1/11 - formation of such a background pattern being obvious. Dependent claims 39-44 are rejected for the same reasons applied against analogous claims 29-34.

8. Claims 27 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Leo et al. (US 3,214,309).

Leo et al. discloses embossing a sheet between embossing rollers where the male embossing roller is formed by first forming a series of protrusions (note esp. 48, 50 in fig. 8) and then removing the protrusions 50 (fig. 8) while leaving the remaining protrusions, this being considered to satisfy the requirements of claims 27 and 37.

9. Claims 29-33 and 39-43 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Leo et al. (US 3,214,309).

As to claims 29/39, although as noted above it is not entirely clear what the scope of this claim is, it would seem reasonable to consider that the depicted patterning

in Leo et al. would improve the "aesthetics" of the material – in any event, it further would have been obvious to improve the material aesthetics.

As to claims 30/40 and 33/43, again, although it is not entirely clear what the scope of these claims is, it would seem reasonable to consider that the depicted provision of numerous repeating embossments would make the material "more cloth-like" and softer as claimed – in any event, even if not within these claims, it would have been obvious to improve the material feel and appearance for only the expected results.

As to claims 31/41, as noted above, it is not clear what constitutes "relatively low caliber" and relatively low quality/cost materials as there is no indication of what these are relative to. In any event, it would have been obvious to use low cost/quality materials if desired in order to reduce the cost of the final product.

As to claims 32/42, the depicted multiple embossments are considered to define a "graphic" as claimed.

10. Claims 27, 29-34, 37 and 39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted state of the prior art and/or Nystrand (US 3,867,225) taken in view of Gutknecht et al. (US 2,854,336), Morrison et al. (US 5,771,796), Nakanose et al. (US 4,062,918) and King (US 2,638,050).

The admitted state of the prior art (pages 1-3 of the specification) as well as Nystrand provide evidence that embossing sheets between rollers where the embossing roller includes plural protrusions thereon is well known and conventional in this art. It further is a known embossing design expedient in this art to provide the embossing design in the form of a foreground pattern superimposed upon a regular background

pattern – Gutknecht et al. (esp. figs. 1/11) as well as Morrison et al. and Nakanose (esp. fig. 3B) being exemplary, it being therefore considered obvious to emboss sheets with such multi-type patterns based upon a foreground pattern superimposed on an essentially regular background pattern. As to formation of the embossing roll to make such patterns, King teaches a suitable process for forming rollers with a desired multi-patterned surface configuration by providing a regular protrusion pattern that is to be subsequently removed in selected areas. Morrison et al. provides additional evidence of a known and suitable process for forming embossing rollers with a regular pattern surrounding another pattern by forming the regular pattern followed by subsequent removal of material in selected areas that already include the regular pattern of protrusions. It should also be pointed out that Morrison et al. indicates in the background section that "[i]t has, also, been not uncommon in the industry to combine on one embossing cylinder or roll a design formed in part by acid etching and in part by mill engraving" (col. 2, lines 54-64). It is thus submitted that in light of these teachings of Morrison et al., as well as that of King, the ordinary artisan would have found it to have been a prima facie obvious method to form a multi-pattern roller by first forming a regular pattern over the entire roller and subsequently machining or otherwise removing the raised areas where desired - such would have further been expected to be advantageous in allowing the use of simpler methods to effect the initial regular patterning of the roller.

As to claims 29/39, although as noted above it is not entirely clear what the scope of this claim is, it would seem reasonable to consider that the conventional

patterning would improve the "aesthetics" of the material – in any event, it further would have been obvious to improve the material aesthetics.

As to claims 30/40 and 33/43, again, although it is not entirely clear what the scope of these claims is, it would seem reasonable to consider that the provision of numerous repeating embossments would make the material "more cloth-like" and softer as claimed – in any event, even if not within these claims, it would have been obvious to improve the material feel and appearance for only the expected results.

As to claims 31/41, as noted above, it is not clear what constitutes "relatively low caliber" and relatively low quality/cost materials as there is no indication of what these are relative to. In any event, it would have been obvious to use low cost/quality materials if desired in order to reduce the cost of the final product.

As to claims 32/42, multiple protrusion embossments are considered to define a "graphic" as claimed.

11. Claims 28 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted state of the prior art and/or Nystrand (US 3,867,225) taken in view of Gutknecht et al. (US 2,854,336), Morrison et al. (US 5,771,796), Nakanose et al. (US 4,062,918) and King (US 2,638,050) as applied above, and further in view of Lantz et al. (US 5,836,930).

To apply the above noted teachings to any sheet materials that are conventionally embossed would have been obvious, Lantz et al. (col. 7, lines 13-15) providing evidence that it is known that diaper backsheet materials can be embossed to provide a more aesthetic appearance.

12. Note: It is noted that this application claims benefit as a CIP of 08/816,345, filed March 13, 1997. Being a CIP, any claims that are fully supported by this grandparent application would be entitled to this filing date while any claims that are *not* fully supported therein, would only be entitled to the US filing date of the immediate parent 09/312,531 (i.e. May 14, 1999). From an examination of the grandparent application, it appears that claims 27 and 37 are supported by the disclosure therein and therefore entitled to its earlier filing date. However, it does not appear that the requirements of any of the dependent claims, i.e. claims 28-36 and 38 to 46, are described either explicitly or implicitly in the grandparent application and therefore these claims would *not* be entitled to benefit of the filing date of the grandparent application. Because of this, EP 798,106, published 10-1-1997 (i.e. more than one year prior to May 14, 1999), which apparently corresponds to the grandparent application, is available as prior art against these dependent claims. Rejections using this reference therefore follow:

13. Claims 28-34 and 38-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 798106 to Tronchetti taken in view of Lantz et al. (US 5,836,930) and Huang et al. (US 5,147,347).

EP '106 discloses an embossing process, including forming the embossing roll, that clearly meets claims 27 and 37. To apply these teachings to any sheet materials that are conventionally embossed would have been obvious, Lantz et al. (col. 7, lines 13-15) as well as Huang et al. (col. 6, lines 20-24) providing evidence that it is known that diaper backsheet materials can be embossed to provide a more aesthetic appearance as well as soft, "more garment-like appearance"; embossing diaper

backsheets as required by claims 28 and 38 being therefore obvious. As to claims 29/39, 30/40 and 33/43, as noted, embossing to improve aesthetics, improve softness and make the embossed sheet more garment or cloth-like is known as evidenced by the above described parts of Lantz et al. and Huang et al. and would have been obvious for only the expected results. As to claims 31/41, as noted above, it is not clear what constitutes "relatively low caliber" and relatively low quality/cost materials as there is no indication of what these are relative to. In any event, it would have been obvious to use low cost/quality materials if desired in order to reduce the cost of the final product. As to claims 32/42, it is considered conventional per se to emboss graphics, it being obvious to adapt the EP '106 process to any known embossing design that is consistent with the basic roll forming process as described therein for only the expected results. As to claims 34/44, EP '106 discloses that a rubber or other flexible roller be used in concert with the embossing roller but does not suggest that the embossing roller be steel. It however is taken to have been extremely well known to form embossing rollers from steel for the obvious advantages in terms of durability, etc., it being therefore obvious to form the embossing roller of EP '106 from steel.

14. Claims 35 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over [the admitted state of the prior art and/or Nystrand (US 3,867,225) taken in view of Gutknecht et al. (US 2,854,336), Morrison et al. (US 5,771,796), Nakanose et al. (US 4,062,918) and King (US 2,638,050)] or [EP 798106 to Tronchetti taken in view of Lantz et al. (US 5,836,930) and Huang et al. (US 5,147,347)] as applied above, and further in view of Schutz et al. (US 4,361,085).

The admitted prior art, Nystrand and EP '106 each disclose use of a resilient press roll but do not suggest forming a recess therein. Schutz et al. is directed to improved resilient press rolls for use in embossing and in particular suggests providing grooves (19) in the resilient press roll to improve embossing performance, it being obvious to include such in a resilient press roll as in the primary references in light of these teachings. Such satisfies the claim requirement for forming a recess in the resilient roller.

15. Claims 36 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over [the admitted state of the prior art and/or Nystrand (US 3,867,225) taken in view of Gutknecht et al. (US 2,854,336), Morrison et al. (US 5,771,796), Nakanose et al. (US 4,062,918) and King (US 2,638,050)] or [EP 798106 to Tronchetti taken in view of Lantz et al. (US 5,836,930) and Huang et al. (US 5,147,347)] as applied above, and further in view of Schulz (US 5,091,032).

As to claims 36 and 46, embossing roll configurations including a resilient roll that contacts two embossing rolls and that also serves to emboss two sheets are known to be suitable and effective configurations in this art – note embossing rolls 30 and 36 cooperating with resilient roll 28 in Schulz. To emboss using such a known suitable and effective configuration would therefore have been obvious and lead to only the expected results.


16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
January 3, 2004